

To: Commissioner for Patents of USPTO
For Examiner Mrs. Lisa M. Saldano

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Dear Sir/Madam:

In accordance with USPTO Communication dated 11/16/2004 on the application 10/648,649 from 08/27/2003 (Art unit 3673), I am sending you my reply and the materials required by the Examiner.

Enclosure: materials mentioned above in 1/4 pages.

Yours faithfully,



J. Abramovich

(Address for correspondence: 8/29 Dolfin Str.,
Bat-Yam, 59456, Israel)

Reply to Office Communication (Detailed Action)

dated Nov. 16, 2004 for application 10/648,649 from August 27, 2003

As for the division "Information Disclosure Statement" in "Detailed Action", I would like to inform you that in the Specification I have presented (and gave short contents of) those sources of information known to me (at the moment of filing the application) which I considered related to the subject.

I am highly grateful for the new information found and sent to me by the Examiner.

Hereby I would like to attract attention of the Examiner that out of 11 inventions given by USPTO in Office Communication dated May 25, 2004 ("Notice of References Cited") two of them (under the code "C" and "G" – author Stangroom) appeared to be the same, and four (under codes D, F, I, N – authors Mougin and Sobinger) have been mentioned by me in my application.

Hereby I have no objection to Examiner's guideline that unless the references have been cited by the examiner on form PTO-892, they have not been considered.

As for division "Claim Objection" in "Detailed Action" it seems that general comment of the Examiner according to all claims 1-7 consisting in the fact that they "are not clearly or concisely written" remains to be unclear to me without definite indications on what is really not clear to you.

Claims 1-7 have been composed so that the main ideas of my solution (method according to claims 4-7) should be clear with the intention of being used by the specialists in the field of the invention on the basis of facilities complex mentioned in claims 1-3.

Of course, I do understand that the "Claims" wording can be improved, though it would be rather difficult to fulfil at the present stage without definite remarks by the Examiner.

Further, I have no information on official instructions (according to US legislation) on prohibition the division of essential features ^{of invention} by hyphens and bullets (starting from new lines) for better understanding by the expert or simply a specialist in the given field.

Furthermore, in case of necessity, I can give numerous examples of US patents where features of invention in a single clause of a division "I claim" are separated even by letters with brackets (!?), which are not simpler than the division used by me and do not "disrupt the flow of the language and claim comprehension".

However, as the Examiner requires correction of such a system of writing, I (despite the fact that it will, otherwise, make it difficult to read and analyze the "Claims") accept the division "I claim" without the "hyphens and bullets" mentioned.

As for division "Claim Rejections - 35 USC § 103" in "Detailed Action" I cannot agree with the Examiner's opinion that "the subject matter on the whole would have been obvious at the time the invention

was made to the person having ordinary skill in the art to which said subject matter pertains", due to the following reasons:

First, combination of essential features of the two independent solutions proposed (united by a common inventive concept) possesses novelty, as no analogues presented by the Examiner (and partially considered by me previously) do contain the given combination (claims 1-7).

Second, only the mentioned combination of features which characterizes the simplest method for preparing fresh water production out of such a specific source as an iceberg, really permits to provide a reliable insulation for any shape of the iceberg from sea water (i.e. to exclude losses of fresh water frozen in an iceberg) and its practical protection against the destructive action of ocean waves.

Hereby, besides the natural necessity in main elements of the said complex of means presented in the "Claims", the presence of one cloth with the original design and considerable length is principally important for forming the basis of the envelope for embracing the iceberg from the bottom by the method according to claims 4-7 (as opposed to Merrill's approach according to patent US 3,289,415) not known from opposing solutions on the subject matter.

The cloth is made out of two layers of waterproof material. The layers are connected with each other along the lines forming a net out of cells (air cushions) connected by air ducts united into a single unit and having the pipes for saline water removal also going through it (pipes have an open outlet on one side of the cloth); ^{on other side of the cloth} a system of belts tightening in the

form of two centers of concentric circumferences of rings passed through loops (each circumference center occupies its own half of the cloth).

There also exist other design peculiarities (reflected in claim 1) which, according to my knowledge, together with those described have not been proposed by any person specializing in the art.

This designer's approach has not been found up to now, even by Sobinger in patent DE 3315744A1.

The method of iceberg insulation proposed by me (Claims 4-7) in the briefest (summarized) form includes submerging the "roll" (the notion has been disclosed in the division "Summary of the invention") of the cloth described under the iceberg, its embracing of the iceberg underwater part, pumping the air into the air cushions rows of the cloth according to a predetermined program, unrolling the "roll" and complete embracing of the iceberg underwater part and then, the whole iceberg, tightening the belts of the gigantic envelope formed and giving an elongated form to it while continuing the drift of the "packed iceberg" up to its meeting the water tanker or subsequent towing of the fresh water capacity obtained to the port of destination.

There also exist other technological stages and peculiarities (reflected in claim 4 – the main claim for the method) which, as well as the others mentioned above, are unknown to have appeared with other respected specialists in this field.

That's why, according to my opinion (being also a specialist in this field), the combination of features presented by me in the application

materials (in particular in claims 4-7) cannot be synthesized by a person with the ordinary skill in the art without creative approach to solving the problems under consideration, i.e. it is not an obvious solution for competent executor.

Hereby the position of the Examiner denying lack of non-obviousness (level of invention) of the solutions proposed is unclear to me.

It is really strange that, if the author Sobinger in 1983 (when he filed an application in the FRG and in 1984 when the patent DE 3315744 A, which was given by me as one of the analogues of my invention, has been granted) has failed in the wording for the method of iceberg insulation with the aim of further production of fresh water, as it was mentioned by the Examiner in the last phrase of clause 8 in division "Claim Rejections", p.5, lines 6-7 *from the end*.

then how the author Merrill in 1962 (when he filed the application in the USA and in 1966 when the patent US 3,289,415 has been granted, which was also given by me as one of the analogues of my invention), i.e., almost 21 years before Sobinger, has made such basic steps, according to the Examiner, which are necessary for developing a method in such a variant which I have presented in the present application in 2003, i.e. 20 years more after the invention, and which (Merril steps) have not been used or formulated before me by other specialists?

And if specialist Sobinger having been granted the patent in the present epoch (1984) has not come to the idea of using the approach of specialist Merrill (1962, i.e. from the "previous technical generation"), and the Examiner after 20 more years (and altogether 41 years after Merrill!) considers such a virtual unification of the known solutions obvious for a

person with ordinary skills in the art (only after the real presentation of the complex solution by me only), then I cannot agree with the logic and conclusion of the Examiner because this obviousness has not, in essence, been proved in the given case.

Moreover, the essence of technical solutions (in part of the means and the method of their application) as well as the form of their presentation (claims 1-6, except for claim 7, which has absolutely facultative and utilization character) there are no opposing sources declared for me which anticipate the novelty of invention and the level of invention of my technical solutions, whereas in Merrill's patent mentioned neither the complex of means proposed by me (in full volume), nor my method have been presented.

In this case I would like to draw the attention of the Examiner to the fact that patent sources mentioned by her have been known to me in their majority, but not mentioned in the application, as, in essence (according to my opinion), they are even further from my solution (in particular, out of 4 inventions by Moquin, three US patents have been mentioned in the division "Background of the invention", and the 4th mentioned by the Examiner is the analogue of one of the 3 US patents mentioned).

As for division "Response to Arguments" in "Detailed Action" I am forwarding you my responses according to clauses marked by the Examiner (clause 4, pp.5-6):

- a) As it has been mentioned earlier the division "I claim" is attached herewith without hyphens and bullets mentioned by the Examiner .
- b) Explanations relative to the expression "separate cells".

"A separate cell" represents a hollow rectangle or a square having two layers in the surface of its foundation, and the faces on all the 4 sides .

serve as the lines for connecting foundations, i.e. this is an air cushion (see, in particular, page 8 of the description, lines 10-14) pumped by air in the process of realizing the method proposed. The connection lines mentioned – air ducts – serving for connecting “separate cells” form a network for connecting both layers of a single cloth having considerable length (page 8, lines 7-10).

- c) Explanations of “single unit” and its relation to “the cloth edge intersection” and “air ducts”.

Each air cushion has one end of air ducts inserted into it, and all the group of air ducts (pipelines) is positioned in channels (which serve for separating the separate cells-cushions mentioned), and their second ends are brought together into a single compact unit at the end of the cloth (first rolled out) (page 8, lines 10-13 from the end) in the region of the cloth edge intersection with its diameter parallel to a random row of air cushions (page 8, lines 8-9 from the end). “Single unit” is situated in that place (where all air ducts are brought together) called the “outlet”. Hereby the Examiner’s direction for improving the language of the “Abstract” is not directly connected to wording of “Claims”, and the terminology used by me in the answer remains without changes (it is only explained).

- d) Explanations of “the relationship between towing hook, pipes, channel and central part of cloth”.

The outlet mentioned is that very part of the cloth where its connection with the technological ship is maintained.

Structurally, this connection represents a bundle of a towing rope and pipes-air ducts mentioned packed together (page 8, lines 3-7 from the end) which are laid in channels dividing the cells-cushions.

In the application the connection of the cloth to the technological ship is called a “navel-string”. Pumping the air in or out of the air

cushions the cloth is carried out through that navel-string, thus providing for the cloth floating or submersion (page 9, lines 1-6).

- e) Explanations of "the bracing belts and associated loops and their position relative to the cloth", what the applicant means by "the other side of cloth".

"Other side of cloth" represents the second outer surface of the cloth (when the cloth is rolled out it is, in particular, the lower surface), where the system of bracing belts is situated (Fig.3 as well as page 16, lines 1-4 from the end; page 17, lines 1-6), which in its turn forms two centers of concentric rings, each consisting of rings decreasing in diameter (each ring-it is a bracing belt 10 lead through loops 31, Fig.26). Loops are situated at equal intervals along the circumference of the bracing belt and are fixed in the surface of the cloth layer (page 34, lines 4-11 from the end).

- * -

Hereby, I would like to mention that the questions from the division "Response to Arguments" have been asked only at the moment (under conditions of a rather limited time – practically less than 2 weeks) and not in the first "Office Action" dated 05.25.2004 where I had practically 2,5 months for the answer.

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Simultaneously I would like to draw attention to the fact that the Examiner hasn't made any (even formal) remarks on the method proposed (claims 4-7) and hasn't asked for any explanations concerning its essence (though it is the method which can cause questions due to multiplicity of its stages). This fact serves as one more certification in favor of the method proposed as neither novelty, nor usefulness

(feasibility), nor non-obvious^{ness} for the specialist hasn't been rejected by the Examiner.

As for the division "Conclusion" in "Detailed action", it remains unclear to me what conclusion has been made by the Examiner on the whole.

As for what I do think, due to detailed description in the application and my explanation in the present reply, is that my invention is novel, useful and non-obvious for persons in the art, and that's why it deserves rightful protection in the form of a patent.

Appendix: mentioned in 5 pages.

Respectfully yours and hoping
for objective solution of the Examiner
in relation to the present application

Inventor J.Abramovich

